



PCT

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/913,800

DATE: 05/08/2002

TIME: 11:06:02

Input Set : N:\paola\US09913800.raw

Output Set: N:\CRF3\05082002\I913800.raw

ENTERED

1 <110> APPLICANT: Brett P. Monia  
2 Lex M. Cowsert  
3 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF AKT-2 EXPRESSION  
4 <130> FILE REFERENCE: RTSP-0155  
5 <140> CURRENT APPLICATION NUMBER: US/09/913,800  
6 <141> CURRENT FILING DATE: 2001-08-16  
7 <150> PRIOR APPLICATION NUMBER: 09/256,465  
8 <151> PRIOR FILING DATE: 1999-02-23  
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17 <222> LOCATION: (88)..(1533)  
18 <400> SEQUENCE: 1

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| 19 | gagactgtgc cctgtccacg gtgcctcctg catgtcctgc tgcctgagc tgtcccgagc | 60  |
| 20 | taggtgacag cgtaccacgc tgccacc atg aat gag gtg tct gtc atc aaa    | 111 |
| 21 | Met Asn Glu Val Ser Val Ile Lys                                  |     |
| 22 | 1 5  |     |
| 23 | gaa ggc tgg ctc cac aag cgt ggt gaa tac atc aag acc tgg agg cca  | 159 |
| 24 | Glu Gly Trp Leu His Lys Arg Gly Glu Tyr Ile Lys Thr Trp Arg Pro  |     |
| 25 | 10 15 20   |     |
| 26 | cgg tac ttc ctg ctg aag agc gac ggc tcc ttc att ggg tac aag gag  | 207 |
| 27 | Arg Tyr Phe Leu Leu Lys Ser Asp Gly Ser Phe Ile Gly Tyr Lys Glu  |     |
| 28 | 25 30 35 40  |     |
| 29 | agg ccc gag gcc cct gat cag act cta ccc ccc tta aac aac ttc tcc  | 255 |
| 30 | Arg Pro Glu Ala Pro Asp Gln Thr Leu Pro Leu Asn Asn Phe Ser      |     |
| 31 | 45 50 55   |     |
| 32 | gta gca gaa tgc cag ctgatg aag acc gag agg ccg cga ccc aac acc   | 303 |
| 33 | Val Ala Glu Cys Gln Leu Met Lys Thr Glu Arg Pro Arg Pro Asn Thr  |     |
| 34 | 60 65 70   |     |
| 35 | ttt gtc ata cgc tgc ctg cag tgg acc aca gtc atc gag agg acc ttc  | 351 |
| 36 | Phe Val Ile Arg Cys Leu Gln Trp Thr Thr Val Ile Glu Arg Thr Phe  |     |
| 37 | 75 80 85   |     |
| 38 | cac gtg gat tct cca gac gag agg gag gag tgg atg cgg gcc atc cag  | 399 |
| 39 | His Val Asp Ser Pro Asp Glu Arg Glu Glu Trp Met Arg Ala Ile Gln  |     |
| 40 | 90 95 100  |     |
| 41 | atg gtc gcc aac agc ctc aag cag cgg gcc cca ggc gag gac ccc atg  | 447 |
| 42 | Met Val Ala Asn Ser Leu Lys Gln Arg Ala Pro Gly Glu Asp Pro Met  |     |
| 43 | 105 110 115 120  |     |
| 44 | gac tac aag tgt ggc tcc ccc agt gac tcc tcc acg act gag gag atg  | 495 |

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| 45 | Asp | Tyr | Lys | Cys | Gly | Ser | Pro | Ser | Asp | Ser | Ser | Thr | Thr | Glu | Glu | Met |      |
| 46 |     |     |     |     | 125 |     |     |     |     | 130 |     |     |     |     | 135 |     |      |
| 47 | gaa | gtg | gcg | gtc | agc | aag | gca | cgg | gct | aaa | gtg | acc | atg | aat | gac | ttc | 543  |
| 48 | Glu | Val | Ala | Val | Ser | Lys | Ala | Arg | Ala | Lys | Val | Thr | Met | Asn | Asp | Phe |      |
| 49 |     |     |     | 140 |     |     |     |     | 145 |     |     |     |     | 150 |     |     |      |
| 50 | gac | tat | ctc | aaa | ctc | ctt | ggc | aag | gga | acc | ttt | ggc | aaa | gtc | atc | ctg | 591  |
| 51 | Asp | Tyr | Leu | Lys | Leu | Leu | Gly | Lys | Gly | Thr | Phe | Gly | Lys | Val | Ile | Leu |      |
| 52 |     |     | 155 |     |     |     |     | 160 |     |     |     |     | 165 |     |     |     |      |
| 53 | gtg | cgg | gag | aag | gcc | act | ggc | cgc | tac | tac | gcc | atg | aag | atc | ctg | cga | 639  |
| 54 | Val | Arg | Glu | Lys | Ala | Thr | Gly | Arg | Tyr | Tyr | Ala | Met | Lys | Ile | Leu | Arg |      |
| 55 |     |     | 170 |     |     |     | 175 |     |     |     |     | 180 |     |     |     |     |      |
| 56 | aag | gaa | gtc | atc | att | gcc | aag | gat | gaa | gtc | gct | cac | aca | gtc | acc | gag | 687  |
| 57 | Lys | Glu | Val | Ile | Ile | Ala | Lys | Asp | Glu | Val | Ala | His | Thr | Val | Thr | Glu |      |
| 58 | 185 |     |     |     |     | 190 |     |     |     |     | 195 |     |     |     | 200 |     |      |
| 59 | agc | cgg | gtc | ctc | cag | aac | acc | agg | cac | ccg | ttc | ctc | act | gcg | ctg | aag | 735  |
| 60 | Ser | Arg | Val | Leu | Gln | Asn | Thr | Arg | His | Pro | Phe | Leu | Thr | Ala | Leu | Lys |      |
| 61 |     |     |     | 205 |     |     |     |     |     | 210 |     |     |     | 215 |     |     |      |
| 62 | tat | gcc | ttc | cag | acc | cac | gac | cgc | ctg | tgc | ttt | gtg | atg | gag | tat | gcc | 783  |
| 63 | Tyr | Ala | Phe | Gln | Thr | His | Asp | Arg | Leu | Cys | Phe | Val | Met | Glu | Tyr | Ala |      |
| 64 |     |     | 220 |     |     |     |     |     | 225 |     |     |     |     | 230 |     |     |      |
| 65 | aac | ggg | ggt | gag | ctg | ttc | ttc | cac | ctg | tcc | cgg | gag | cgt | gtc | ttc | aca | 831  |
| 66 | Asn | Gly | Gly | Glu | Leu | Phe | Phe | His | Leu | Ser | Arg | Glu | Arg | Val | Phe | Thr |      |
| 67 |     |     | 235 |     |     |     |     | 240 |     |     |     | 245 |     |     |     |     |      |
| 68 | gag | gag | cgg | gcc | cgg | ttt | tat | ggt | gca | gag | att | gtc | tcg | gct | ctt | gag | 879  |
| 69 | Glu | Glu | Arg | Ala | Arg | Phe | Tyr | Gly | Ala | Glu | Ile | Val | Ser | Ala | Leu | Glu |      |
| 70 |     |     | 250 |     |     |     | 255 |     |     |     |     | 260 |     |     |     |     |      |
| 71 | tac | ttg | cac | tcg | cgg | gac | gtg | gta | tac | cgc | gac | atc | aag | ctg | gaa | aac | 927  |
| 72 | Tyr | Leu | His | Ser | Arg | Asp | Val | Val | Tyr | Arg | Asp | Ile | Lys | Leu | Glu | Asn |      |
| 73 | 265 |     |     |     |     | 270 |     |     |     | 275 |     |     |     |     | 280 |     |      |
| 74 | ctc | atg | ctg | gac | aaa | gat | ggc | cac | atc | aag | atc | act | gac | ttt | ggc | ctc | 975  |
| 75 | Leu | Met | Leu | Asp | Lys | Asp | Gly | His | Ile | Lys | Ile | Thr | Asp | Phe | Gly | Leu |      |
| 76 |     |     |     | 285 |     |     |     |     |     | 290 |     |     |     | 295 |     |     |      |
| 77 | tgc | aaa | gag | ggc | atc | agt | gac | ggg | gcc | acc | atg | aaa | acc | ttc | tgt | ggg | 1023 |
| 78 | Cys | Lys | Glu | Gly | Ile | Ser | Asp | Gly | Ala | Thr | Met | Lys | Thr | Phe | Cys | Gly |      |
| 79 |     |     | 300 |     |     |     |     |     | 305 |     |     |     |     | 310 |     |     |      |
| 80 | acc | ccg | gag | tac | ctg | gcg | cct | gag | gtg | ctg | gag | gac | aat | gac | tat | ggc | 1071 |
| 81 | Thr | Pro | Glu | Tyr | Leu | Ala | Pro | Glu | Val | Leu | Glu | Asp | Asn | Asp | Tyr | Gly |      |
| 82 |     |     | 315 |     |     |     |     |     | 320 |     |     |     | 325 |     |     |     |      |
| 83 | cgg | gcc | gtg | gac | tgg | tgg | ggg | ctg | ggt | gtg | gtc | atg | tac | gag | atg | atg | 1119 |
| 84 | Arg | Ala | Val | Asp | Trp | Trp | Gly | Leu | Gly | Val | Val | Met | Tyr | Glu | Met | Met |      |
| 85 |     |     | 330 |     |     |     | 335 |     |     |     |     | 340 |     |     |     |     |      |
| 86 | tgc | ggc | cgc | ctg | ccc | ttc | tac | aac | cag | gac | cac | gag | cgc | ctc | ttc | gag | 1167 |
| 87 | Cys | Gly | Arg | Leu | Pro | Phe | Tyr | Asn | Gln | Asp | His | Glu | Arg | Leu | Phe | Glu |      |
| 88 | 345 |     |     |     |     | 350 |     |     |     |     | 355 |     |     |     | 360 |     |      |
| 89 | ctc | atc | ctc | atg | gaa | gag | atc | cgc | ttc | ccg | cgc | acg | ctc | agc | ccc | gag | 1215 |
| 90 | Leu | Ile | Leu | Met | Glu | Glu | Ile | Arg | Phe | Pro | Arg | Thr | Leu | Ser | Pro | Glu |      |
| 91 |     |     |     | 365 |     |     |     |     |     | 370 |     |     |     | 375 |     |     |      |
| 92 | gcc | aag | tcc | ctg | ctt | gct | ggg | ctg | ctt | aag | aag | gac | ccc | aag | cag | agg | 1263 |
| 93 | Ala | Lys | Ser | Leu | Leu | Ala | Gly | Leu | Leu | Lys | Lys | Asp | Pro | Lys | Gln | Arg |      |

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94          380          385          390
95      ctt ggt ggg ggg ccc agc gat gcc aag gag gtc atg gag cac agg ttc      1311
96      Leu Gly Gly Gly Pro Ser Asp Ala Lys Glu Val Met Glu His Arg Phe
97          395          400          405
98      ttc ctc agc atc aac tgg cag gac gtg gtc cag aag aag ctc ctg cca      1359
99      Phe Leu Ser Ile Asn Trp Gln Asp Val Val Gln Lys Lys Leu Leu Pro
100          410          415          420
101      ccc ttc aaa cct cag gtc acg tcc gag gtc gac aca agg tac ttc gat      1407
102      Pro Phe Lys Pro Gln Val Thr Ser Glu Val Asp Thr Arg Tyr Phe Asp
103      425          430          435          440
104      gat gaa ttt acc gcc cag tcc atc aca atc aca ccc cct gac cgc tat      1455
105      Asp Glu Phe Thr Ala Gln Ser Ile Thr Ile Thr Pro Pro Asp Arg Tyr
106          445          450          455
107      gac agc ctg ggc tta ctg gag ctg gac cag cgg acc cac ttc ccc cag      1503
108      Asp Ser Leu Gly Leu Leu Glu Leu Asp Gln Arg Thr His Phe Pro Gln
109          460          465          470
110      ttc tcc tac tcg gcc agc atc cgc gag tga gcagtctgcc cacgcagagg      1553
111      Phe Ser Tyr Ser Ala Ser Ile Arg Glu
112          475          480
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120 <223> OTHER INFORMATION: PCR Primer
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126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: PCR Primer
130 <400> SEQUENCE: 3
131      gcaggcagcg tatgacaaag      20
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134 <211> LENGTH: 20
135 <212> TYPE: DNA
136 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: PCR Probe
139 <400> SEQUENCE: 4
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143 <211> LENGTH: 19
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
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153 <212> TYPE: DNA  
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163 <213> ORGANISM: Artificial Sequence  
164 <220> FEATURE:  
165 <223> OTHER INFORMATION: PCR Probe  
166 <400> SEQUENCE: 7  
167       caagcttccc gttctcagcc 20  
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172 <213> ORGANISM: Artificial Sequence  
173 <220> FEATURE:  
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176       tggacagggc acagtctc 18  
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Input Set : N:\paola\US09913800.raw

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212 ccagccttct ttgatgac 18  
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217 <213> ORGANISM: Artificial Sequence  
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224 <211> LENGTH: 18  
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226 <213> ORGANISM: Artificial Sequence  
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233 <211> LENGTH: 18  
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Input Set : N:\paola\US09913800.raw  
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The rules require that a line not exceed 72 characters in length. This includes spaces.

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Seq#:9; Line(s) 185  
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Seq#:17; Line(s) 257  
Seq#:18; Line(s) 266  
Seq#:19; Line(s) 275  
Seq#:20; Line(s) 284  
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Seq#:42; Line(s) 482

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VERIFICATION SUMMARY

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